

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>		Application Number 10/796,442
		Filing Date March 9, 2004
		First Named Inventor Swihart
		Group Art Unit 2812
		Examiner Name Unknown
Total Number of Pages in This Submission	6	Attorney Docket Number 19226/2282 (R-5782)

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> A copy of the Notice to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers <i>(for an Application)</i> <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Application Data Sheet <input type="checkbox"/> Request for Corrected Filing Receipt with Enclosures <input checked="" type="checkbox"/> A self-addressed, prepaid postcard for acknowledging receipt <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <input checked="" type="checkbox"/> PTO-1449 Form (in duplicate) with 34 references attached
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm <i>or</i> Individual name	Tate Tischner Nixon Peabody LLP Clinton Square, P.O. Box 31051 Rochester, New York 14603-1051 Telephone: (585) 263-1363 Fax: (585) 263-1600
Signature	<i>Tate Tischner</i> Registration No. 56,048
Date	<i>7/30/04</i>

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<i>July 30, 2004</i> Date	<i>Ruth R. Smith</i> Signature Ruth R. Smith Typed or printed name



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<u>July 30, 2004</u> Date		 Signature Ruth R. Smith Typed or printed name



PATENT
Docket No.: 19226/2282 (R-5782)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Swihart et al.)	Examiner:
Serial No. : 10/796,442)	
Cnfrm. No. : 1817)	Art Unit:
Filed : March 9, 2004)	2812
For : PROCESS FOR PREPARING LUMINESCENT SILICON NANOPARTICLES)	
)	
)	

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§ 1.97-1.98

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR §§ 1.97-1.98, applicant hereby brings to the attention of the United States Patent and Trademark Office, the enclosed references listed on the attached PTO-1449 form. Copies of the non-U.S. Patent references are provided.

Pursuant to 37 CFR § 1.97(b)(3), no fee is required. Should it be determined that a fee is required, however, the Commissioner is authorized to charge that fee to Deposit Account No. 14-1138.

Respectfully submitted,

Tate Tischner
Registration No. 56,048

Date: 7/30/04

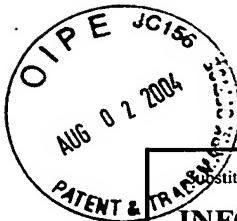
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<p style="text-align: center;"><i>TRADE SHOW SUBSTITUTE FOR FORM 1449A/PTO</i></p> <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;"><i>(use as many sheets as necessary)</i></p>				<i>Complete if Known</i>	
				Application Number	10/796,442
				Filing Date	March 9, 2004
				First Named Inventor	Swihart et al.
				Art Unit	2812
				Examiner Name	To Be Assigned
Sheet	1	of	4	Attorney Docket Number	19226/2282 (R-5782)

U.S. PATENT DOCUMENTS

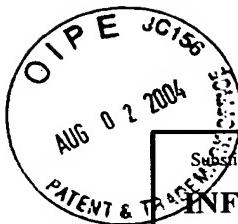
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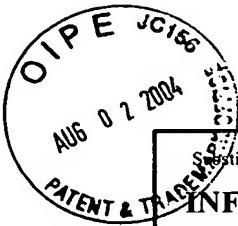
Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	2	of	4	Application Number	10/796,442
				Filing Date	March 9, 2004
				First Named Inventor	Swihart et al.
				Group Art Unit	2812
				Examiner Name	To Be Assigned
				Attorney Docket Number	19226/2282 (R-5782)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ²
	3	Ostraat et al., "Ultraclean Two-Stage Aerosol Reactor for Production of Oxide-Passivated Silicon Nanoparticles for Novel Memory Devices," <i>J. Electrochem. Soc.</i> 148:G265-G270 (2001)				
	4	Ostraat et al., "Synthesis and Characterization of Aerosol Silicon Nanocrystal Nonvolatile Floating-Gate Memory Devices," <i>Applied Physics Letters</i> 79:433-435 (2001)				
	5	Ding et al., "Electrochemistry and Electrogenerated Chemiluminescence from Silicon Nanocrystal Quantum Dots," <i>Science</i> 296:1293-1297 (2002)				
	6	Brus, "Luminescence of Silicon Materials: Chains, Sheets, Nanocrystals, Nanowires, Microcrystals, and Porous Silicon," <i>J. Phys. Chem.</i> 98:3575-3581 (1994)				
	7	Brus et al., "Electronic Spectroscopy and Photophysics of Si Nanocrystals: Relationship to Bulk c-Si and Porous Si," <i>J. Am. Chem. Soc.</i> 117:2915-2922 (1995)				
	8	Nayfeh et al., "Stimulated Blue Emission in Reconstituted Films of Ultrasmall Silicon Nanoparticles," <i>Applied Physics Letters</i> 78:1131-1133 (2001)				
	9	Holmes et al., "Highly Luminescent Silicon Nanocrystals with Discrete Optical Transitions," <i>J. Am. Chem. Soc.</i> 123:3743-3748 (2001)				
	10	English et al., "Size Tunable Visible Luminescence from Individual Organic Monolayer Stabilized Silicon Nanocrystal Quantum Dots," <i>Nano Letters</i> 2:681-685 (2002)				
	11	Baldwin et al., "Solution Reduction Synthesis of Surface Stabilized Silicon Nanoparticles," <i>Chem. Commun.</i> 1822-1823 (2002)				
	12	Heath, "A Liquid-Solution-Phase Synthesis of Crystalline Silicon," <i>Science</i> 258:1131-1133 (1992)				
	13	Belomoin et al., "Observation of a Magic Discrete Family of Ultrabright Si Nanoparticles," <i>Applied Physics Letters</i> 80:841-843 (2002)				
	14	Nayfeh et al., "Second Harmonic Generation in Microcrystallite Films of Ultrasmall Si Nanoparticles," <i>Applied Physics Letters</i> 77:4086-4088 (2000)				

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Substitute for form 1449B/PTO				<i>Complete if Known</i>	
				Application Number	10/796,442
				Filing Date	March 9, 2004
				First Named Inventor	Swihart et al.
				Group Art Unit	2812
				Examiner Name	To Be Assigned
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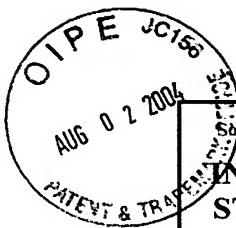
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	15	Bley et al., "A Low-Temperature Solution Phase Route for the Synthesis of Silicon Nanoclusters," <i>J. Am. Chem. Soc.</i> 118:12461-12462 (1996)		
	16	Liu et al., "A New Synthetic Route for the Synthesis of Hydrogen Terminated Silicon Nanoparticles," <i>Materials Science and Engineering</i> B96:72-75 (2002)		
	17	Mayeri et al., "NMR Study of the Synthesis of Alkyl-Terminated Silicon Nanoparticles from the Reaction of SiCl ₄ with the Zintl Salt, NaSi," <i>Chem. Mater.</i> 13:765-770 (2001)		
	18	Lam et al., "Large-Scale Synthesis of Ultrafine Si Nanoparticles by Ball Milling," <i>Journal of Crystal Growth</i> 220:466-470 (2000)		
	19	Borsella et al., "Optical and Morphological Characterization of Si Nanocrystals/Silica Composites Prepared by Sol-gel Processing," <i>Materials Science and Engineering</i> B79:55-62 (2001)		
	20	Botti et al., "Photoluminescence from Silicon Nano-Particles Synthesized by Laser-Induced Decomposition of Silane," <i>Journal of Applied Physics</i> 88:3396-3401 (2000)		
	21	Ehbrecht et al., "Photoluminescence and Resonant Raman Spectra of Silicon Films Produced by Size-Selected Cluster Beam Deposition," <i>Physical Review</i> 56:6958-6964 (1997)		
	22	Huiskens et al., "Structured Films of Light-Emitting Silicon Nanoparticles Produced by Cluster Beam Deposition," <i>Applied Physics Letters</i> 74:3776-3778 (1999)		
	23	Ledoux et al., "Photoluminescence of Size-Separated Silicon Nanocrystals: Confirmation of Quantum Confinement," <i>Applied Physics Letters</i> 80:4834-4836 (2002)		
	24	Ledoux et al., "Effect of Passivation and Aging on the Photoluminescence of Silicon Nanocrystals," <i>Applied Physics Letters</i> 79:4028-4030 (2001)		
	25	Seraphin et al., "Influence of Nanostructure Size on the Luminescence Behavior of Silicon Nanoparticle Thin Films," <i>Journal of Materials Research</i> 12:3386-3392 (1997)		
	26	Wilson et al., "Quantum Confinement in Size-Selected, Surface-Oxidized Silicon Nanocrystals," <i>Science</i> 262:1242-1244 (1993)		

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	27	Littau et al., "A Luminescent Silicon Nanocrystal Colloid via a High-Temperature Aerosol Reaction," <i>J. Phys. Chem.</i> 97:1224-1230 (1993)		
	28	Higashi et al., "Comparison of Si(111) Surfaces Prepared Using Aqueous Solutions of NH ₄ F versus HF," <i>Appl. Phys. Lett.</i> 58:1656-1658 (1991)		
	29	Lie et al., "Preparation and Characterisation of Luminescent Alkylated-Silicon Quantum Dots," <i>Journal of Electroanalytical Chemistry</i> 538-539:183-190 (2002)		
	30	Buriak, "Organometallic Chemistry on Silicon and Germanium Surfaces," <i>Chem. Rev.</i> 102:1271-1308 (2002)		
	31	Wojtyk et al., "Modification of Porous Silicon Surfaces with Activated Ester Monolayers," <i>Langmuir</i> 18:6081-6087 (2002)		
	32	Li et al., "Luminescent Silicon Nanoparticles Capped by Conductive Polyaniline through the Self-Assembly Method," <i>Langmuir</i> 20:1963-1971 (2004)		
	33	Murray et al., "Synthesis and Characterization of Nearly Monodisperse CdE (E = S, Se, Te) Semiconductor Nanocrystallites," <i>J. Am. Chem. Soc.</i> 115:8706-8715 (1993)		
	34	Murray et al., "Synthesis and Characterization of Monodisperse Nanocrystals and Close-Packed Nanocrystal Assemblies," <i>Annu. Rev. Mater. Sci.</i> 30:545-610 (2000)		
	35	Fojtik et al., "Formation of Nanometer-Size Silicon Particles in a Laser Induced Plasma in SiH ₄ ," <i>Ber. Bunsenges. Phys. Chem.</i> 97:1493-1496 (1993)		
	36	Fojtik et al., "Luminescent Colloidal Silicon Particles," <i>Chem. Phys. Lett.</i> 221:363-367 (1994)		

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